

SEQUENCE LISTING

<110> Eisai Co., Ltd.

<120> USING NONHUMAN ANIMAL MODEL, METHOD OF MEASURING TRANSCRIPTIONAL ACTIVITY, METHOD OF MEASURING CELL NUMBER AND METHOD OF MEASURING TUMOR VOLUME

<130> 0459W0-C4305

<150> JP 2004-84810

<151> 2004-03-23

<160> 44

<170> PatentIn version 3.1

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 Gly Ile Ile Pro Val Glu Glu Glu Asn Pro Asp Phe Trp Asn Arg Glu
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 Ala Ala Glu Ala Leu Gly Ala Ala Lys Lys Leu Gln Pro Ala Gln Thr
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 gcc gcc aag aac ctc atc atc ttc ctg ggc gat ggg atg ggg gtg tct 192
 Ala Ala Lys Asn Leu Ile Ile Phe Leu Gly Asp Gly Met Gly Val Ser
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 Thr Val Thr Ala Ala Arg Ile Leu Lys Gly Gln Lys Lys Asp Lys Leu

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Gly Pro Glu Ile Pro Leu Ala Met Asp Arg Phe Pro Tyr Val Ala Leu				
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Ser Lys Thr Tyr Asn Val Asp Lys His Val Pro Asp Ser Gly Ala Thr				
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Ala Thr Ala Tyr Leu Cys Gly Val Lys Gly Asn Phe Gln Thr Ile Gly				
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Gly Val Val Thr Thr Thr Arg Val Gln His Ala Ser Pro Ala Gly Thr				
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Tyr Ala His Thr Val Asn Arg Asn Trp Tyr Ser Asp Ala Asp Val Pro				
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Phe Pro Met Gly Thr Pro Asp Pro Glu Tyr Pro Asp Asp Tyr Ser Gln				
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Ala Ser Leu Asp Pro Ser Val Thr His Leu Met Gly Leu Phe Glu Pro				
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Gly Asp Met Lys Tyr Glu Ile His Arg Asp Ser Thr Leu Asp Pro Ser				
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His Glu Ser Arg Ala Tyr Arg Ala Leu Thr Glu Thr Ile Met Phe Asp	
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Asp Ala Ile Glu Arg Ala Gly Gln Leu Thr Ser Glu Glu Asp Thr Leu	
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Pro Leu Arg Gly Ser Ser Ile Phe Gly Leu Ala Pro Gly Lys Ala Arg	
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Val Leu Lys Asp Gly Ala Arg Pro Asp Val Thr Glu Ser Glu Ser Gly	
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Ser Pro Glu Tyr Arg Gln Gln Ser Ala Val Pro Leu Asp Glu Glu Thr	
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Leu Val His Gly Val Gln Glu Gln Thr Phe Ile Ala His Val Met Ala	
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Phe Ala Ala Cys Leu Pro Tyr Thr Ala Cys Asp Leu Ala Pro Pro	
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Ser	Lys	Thr	Tyr	Asn	Val	Asp	Lys	His	Val	Pro	Asp	Ser	Gly	Ala	Thr
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Gly	Val	Val	Thr	Thr	Thr	Arg	Val	Gln	His	Ala	Ser	Pro	Ala	Gly	Thr
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Asp	Ala	Ile	Glu	Arg	Ala	Gly	Gln	Leu	Thr	Ser	Glu	Glu	Asp	Thr	Leu
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Asp	Arg	Lys													

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 Ala Ala Glu Ala Leu Gly Ala Ala Lys Lys Leu Gln Pro Ala Gln Thr
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Lys	Arg	Gln	Gly	Ala	Arg	Tyr	Val	Trp	Asn	Arg	Thr	Glu	Leu	Met	Gln	
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Arg	Gly	Phe	Phe	Leu	Phe	Val	Glu	Gly	Gly	Arg	Ile	Asp	His	Gly	His	
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Ser	Leu	Val	Thr	Ala	Asp	His	Ser	His	Val	Phe	Ser	Phe	Gly	Gly	Tyr	
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 Ser Lys Thr Tyr Asn Val Asp Lys His Val Pro Asp Ser Gly Ala Thr
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 Ala Thr Ala Tyr Leu Cys Gly Val Lys Gly Asn Phe Gln Thr Ile Gly
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130 135 140
 Glu Val Ile Ser Val Met Asn Arg Ala Lys Lys Ala Gly Lys Ser Val
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 Gly Val Val Thr Thr Thr Arg Val Gln His Ala Ser Pro Ala Gly Thr
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 Tyr Ala His Thr Val Asn Arg Asn Trp Tyr Ser Asp Ala Asp Val Pro
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 Ala Ser Ala Arg Gln Glu Gly Cys Gln Asp Ile Ala Thr Gln Leu Ile
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 Ser Asn Met Asp Ile Asp Val Ile Leu Gly Gly Gly Arg Lys Tyr Met
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 Phe Arg Met Gly Thr Pro Asp Pro Glu Tyr Pro Asp Asp Tyr Ser Gln
 225 230 235 240
 Gly Gly Thr Arg Leu Asp Gly Lys Asn Leu Val Gln Glu Trp Leu Ala
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 Lys Arg Gln Gly Ala Arg Tyr Val Trp Asn Arg Thr Glu Leu Met Gln
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 Ala Ser Leu Asp Pro Ser Val Thr His Leu Met Gly Leu Phe Glu Pro
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 Gly Asp Met Lys Tyr Glu Ile His Arg Asp Ser Thr Leu Asp Pro Ser
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 His Glu Ser Arg Ala Tyr Arg Ala Leu Thr Glu Thr Ile Met Phe Asp
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 Asp Ala Ile Glu Arg Ala Gly Gln Leu Thr Ser Glu Glu Asp Thr Leu
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 Pro Leu Arg Gly Ser Ser Ile Phe Gly Leu Ala Pro Gly Lys Ala Arg
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 Asp Arg Lys Ala Tyr Thr Val Leu Leu Tyr Gly Asn Gly Pro Gly Tyr
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 Ser Pro Glu Tyr Arg Gln Gln Ser Ala Val Pro Leu Asp Glu Glu Thr
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 ggc atc atc cca gtt gag gag gag aac ccg gac ttc tgg aac cgc gag 96
 Gly Ile Ile Pro Val Glu Glu Glu Asn Pro Asp Phe Trp Asn Arg Glu
 20 25 30
 gca gcc gag gcc ctg ggt gcc gcc aag aag ctg cag cct gca cag aca 144
 Ala Ala Glu Ala Leu Gly Ala Ala Lys Lys Leu Gln Pro Ala Gln Thr
 35 40 45
 gcc gcc aag aac ctc atc atc ttc ctg ggc gat ggg atg ggg gtg tct 192
 Ala Ala Lys Asn Leu Ile Ile Phe Leu Gly Asp Gly Met Gly Val Ser
 50 55 60
 acg gtg aca gct gcc agg atc cta aaa ggg cag aag aag gac aaa ctg 240
 Thr Val Thr Ala Ala Arg Ile Leu Lys Gly Gln Lys Lys Asp Lys Leu
 65 70 75 80
 ggg cct gag ata ccc ctg gcc atg gac cgc ttc cca tat gtg gct ctg 288
 Gly Pro Glu Ile Pro Leu Ala Met Asp Arg Phe Pro Tyr Val Ala Leu
 85 90 95
 tcc aag aca tac aat gta gac aaa cat gtg cca gac agt gga gcc aca 336
 Ser Lys Thr Tyr Asn Val Asp Lys His Val Pro Asp Ser Gly Ala Thr
 100 105 110
 gcc acg gcc tac ctg tgc ggg gtc aag ggc aac ttc cag acc att ggc 384
 Ala Thr Ala Tyr Leu Cys Gly Val Lys Gly Asn Phe Gln Thr Ile Gly
 115 120 125
 ttg agt gca gcc gcc cgc ttt aac cag tgc aac acg aca cgc ggc aac 432
 Leu Ser Ala Ala Ala Arg Phe Asn Gln Cys Asn Thr Thr Arg Gly Asn
 130 135 140
 gag gtc atc tcc gtg atg aat cgg gcc aag aaa gca ggg aag tca gtg 480
 Glu Val Ile Ser Val Met Asn Arg Ala Lys Lys Ala Gly Lys Ser Val
 145 150 155 160
 gga gtg gta acc acc aca cga gtg cag cac gcc tcg cca gcc ggc acc 528
 Gly Val Val Thr Thr Thr Arg Val Gln His Ala Ser Pro Ala Gly Thr
 165 170 175
 tac gcc cac acg gtg aac cgc aac tgg tac tcg gac gcc gac gtg cct 576
 Tyr Ala His Thr Val Asn Arg Asn Trp Tyr Ser Asp Ala Asp Val Pro
 180 185 190
 gcc tcg gcc cgc cag gag ggg tgc cag gac atc gct acg cag ctc atc 624

Ala Ser Ala Arg Gln Glu Gly Cys Gln Asp Ile Ala Thr Gln Leu Ile	
195 200 205	
tcc aac atg gac att gac gtg atc cta ggt gga ggc cga aag tac atg	672
Ser Asn Met Asp Ile Asp Val Ile Leu Gly Gly Gly Arg Lys Tyr Met	
210 215 220	
ttt cgc atg gga acc cca gac cct gag tac cca gat gac tac agc caa	720
Phe Arg Met Gly Thr Pro Asp Pro Glu Tyr Pro Asp Asp Tyr Ser Gln	
225 230 235 240	
ggt ggg acc agg ctg gac ggg aag aat ctg gtg cag gaa tgg ctg gcg	768
Gly Gly Thr Arg Leu Asp Gly Lys Asn Leu Val Gln Glu Trp Leu Ala	
245 250 255	
aag cgc cag ggt gcc cgg tat gtg tgg aac cgc act gag ctc atg cag	816
Lys Arg Gln Gly Ala Arg Tyr Val Trp Asn Arg Thr Glu Leu Met Gln	
260 265 270	
gct tcc ctg gac cgg tct gtg acc cat ctc atg ggt ctc ttt gag cct	864
Ala Ser Leu Asp Pro Ser Val Thr His Leu Met Gly Leu Phe Glu Pro	
275 280 285	
gga gac atg aaa tac gag atc cac cga gac tcc aca ctg gac ccc tcc	912
Gly Asp Met Lys Tyr Glu Ile His Arg Asp Ser Thr Leu Asp Pro Ser	
290 295 300	
ctg atg gag atg aca gag gct gcc ctg cgc ctg ctg agc agg aac ccc	960
Leu Met Glu Met Thr Glu Ala Ala Leu Arg Leu Leu Ser Arg Asn Pro	
305 310 315 320	
cgc ggc ttc ttc ctc ttc gtg gag ggt ggt cgc atc gac cat ggt cat	1008
Arg Gly Phe Phe Leu Phe Val Glu Gly Gly Arg Ile Asp His Gly His	
325 330 335	
cat gaa agc agg gct tac cgg gca ctg act gag acg atc atg ttc gac	1056
His Glu Ser Arg Ala Tyr Arg Ala Leu Thr Glu Thr Ile Met Phe Asp	
340 345 350	
gac gcc att gag agg gcg ggc cag ctc acc agc gag gag gac acg ctg	1104
Asp Ala Ile Glu Arg Ala Gly Gln Leu Thr Ser Glu Glu Asp Thr Leu	
355 360 365	
agc ctc gtc act gcc gac cac tcc cac gtc ttc tcc ttc gga ggc tac	1152
Ser Leu Val Thr Ala Asp His Ser His Val Phe Ser Phe Gly Gly Tyr	
370 375 380	
ccc ctg cga ggg agc tcc atc ttc ggg ctg gcc cct ggc aag gcc cgg	1200
Pro Leu Arg Gly Ser Ser Ile Phe Gly Leu Ala Pro Gly Lys Ala Arg	
385 390 395 400	
gac agg aag gcc tac acg gtc ctc cta tac gga aac ggt cca ggc tat	1248
Asp Arg Lys Ala Tyr Thr Val Leu Leu Tyr Gly Asn Gly Pro Gly Tyr	
405 410 415	
gtg ctc aag gac ggc gcc cgg ccg gat gtt acc gag agc gag agc ggg	1296
Val Leu Lys Asp Gly Ala Arg Pro Asp Val Thr Glu Ser Glu Ser Gly	
420 425 430	
agc ccc gag tat cgg cag cag tca gca gtg ccc ctg gac gaa gag acc	1344
Ser Pro Glu Tyr Arg Gln Gln Ser Ala Val Pro Leu Asp Glu Glu Thr	
435 440 445	
cac gca ggc gag gac gtg gcg gtg ttc gcg cgc ggc ccg cag gcg cac	1392

His Ala Gly Glu Asp Val Ala Val Phe Ala Arg Gly Pro Gln Ala His
 450 455 460
 ctg gtt cac ggc gtg cag gag cag acc ttc ata gcg cac gtc atg gcc 1440
 Leu Val His Gly Val Gln Glu Gln Thr Phe Ile Ala His Val Met Ala
 465 470 475 480
 ttc gcc gcc tgc ctg gag ccc tac acc gcc tgc gac ctg gcg ccc ccc 1488
 Phe Ala Ala Cys Leu Glu Pro Tyr Thr Ala Cys Asp Leu Ala Pro Pro
 485 490 495
 gcc ggc acc acc gac gcc gcg cac ccg ggt tac tct aga gtc ggg gcg 1536
 Ala Gly Thr Thr Asp Ala Ala His Pro Gly Tyr Ser Arg Val Gly Ala
 500 505 510
 gcc ggc cgc ttc gag cag aca tga 1560
 Ala Gly Arg Phe Glu Gln Thr
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<210> 15
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 <212> PRT
 <213> Homo sapiens

<400> 15
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 Gly Ile Ile Pro Val Glu Glu Glu Asn Pro Asp Phe Trp Asn Arg Glu
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 Ala Ala Glu Ala Leu Gly Ala Ala Lys Lys Leu Gln Pro Ala Gln Thr
 35 40 45
 Ala Ala Lys Asn Leu Ile Ile Phe Leu Gly Asp Gly Met Gly Val Ser
 50 55 60
 Thr Val Thr Ala Ala Arg Ile Leu Lys Gly Gln Lys Lys Asp Lys Leu
 65 70 75 80
 Gly Pro Glu Ile Pro Leu Ala Met Asp Arg Phe Pro Tyr Val Ala Leu
 85 90 95
 Ser Lys Thr Tyr Asn Val Asp Lys His Val Pro Asp Ser Gly Ala Thr
 100 105 110
 Ala Thr Ala Tyr Leu Cys Gly Val Lys Gly Asn Phe Gln Thr Ile Gly
 115 120 125
 Leu Ser Ala Ala Ala Arg Phe Asn Gln Cys Asn Thr Thr Arg Gly Asn
 130 135 140
 Glu Val Ile Ser Val Met Asn Arg Ala Lys Lys Ala Gly Lys Ser Val
 145 150 155 160
 Gly Val Val Thr Thr Arg Val Gln His Ala Ser Pro Ala Gly Thr
 165 170 175
 Tyr Ala His Thr Val Asn Arg Asn Trp Tyr Ser Asp Ala Asp Val Pro
 180 185 190
 Ala Ser Ala Arg Gln Glu Gly Cys Gln Asp Ile Ala Thr Gln Leu Ile
 195 200 205

Ser Asn Met Asp Ile Asp Val Ile Leu Gly Gly Gly Arg Lys Tyr Met
 210 215 220
 Phe Arg Met Gly Thr Pro Asp Pro Glu Tyr Pro Asp Asp Tyr Ser Gln
 225 230 235 240
 Gly Gly Thr Arg Leu Asp Gly Lys Asn Leu Val Gln Glu Trp Leu Ala
 245 250 255
 Lys Arg Gln Gly Ala Arg Tyr Val Trp Asn Arg Thr Glu Leu Met Gln
 260 265 270
 Ala Ser Leu Asp Pro Ser Val Thr His Leu Met Gly Leu Phe Glu Pro
 275 280 285
 Gly Asp Met Lys Tyr Glu Ile His Arg Asp Ser Thr Leu Asp Pro Ser
 290 295 300
 Leu Met Glu Met Thr Glu Ala Ala Leu Arg Leu Leu Ser Arg Asn Pro
 305 310 315 320
 Arg Gly Phe Phe Leu Phe Val Glu Gly Gly Arg Ile Asp His Gly His
 325 330 335
 His Glu Ser Arg Ala Tyr Arg Ala Leu Thr Glu Thr Ile Met Phe Asp
 340 345 350
 Asp Ala Ile Glu Arg Ala Gly Gln Leu Thr Ser Glu Glu Asp Thr Leu
 355 360 365
 Ser Leu Val Thr Ala Asp His Ser His Val Phe Ser Phe Gly Gly Tyr
 370 375 380
 Pro Leu Arg Gly Ser Ser Ile Phe Gly Leu Ala Pro Gly Lys Ala Arg
 385 390 395 400
 Asp Arg Lys Ala Tyr Thr Val Leu Leu Tyr Gly Asn Gly Pro Gly Tyr
 405 410 415
 Val Leu Lys Asp Gly Ala Arg Pro Asp Val Thr Glu Ser Glu Ser Gly
 420 425 430
 Ser Pro Glu Tyr Arg Gln Gln Ser Ala Val Pro Leu Asp Glu Glu Thr
 435 440 445
 His Ala Gly Glu Asp Val Ala Val Phe Ala Arg Gly Pro Gln Ala His
 450 455 460
 Leu Val His Gly Val Gln Glu Gln Thr Phe Ile Ala His Val Met Ala
 465 470 475 480
 Phe Ala Ala Cys Leu Glu Pro Tyr Thr Ala Cys Asp Leu Ala Pro Pro
 485 490 495
 Ala Gly Thr Thr Asp Ala Ala His Pro Gly Tyr Ser Arg Val Gly Ala
 500 505 510
 Ala Gly Arg Phe Glu Gln Thr
 515

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26

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<212> DNA

<213> Artificial Sequence

<220>

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<400> 17

ttaggatcct ggcagctgtc ac

22

<210> 18

<211> 22

<212> DNA

<213> Artificial Sequence

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<223> primer

<400> 18

gtgacagctg ccaggatcct aa

22

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22

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acggtactct ggagatccag actctgactc tgtgacat 98

<210> 22
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<400> 25

gtaagcttg

9

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33

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39

<210> 29

<211> 39

<212> DNA

<213> Artificial Sequence

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<223> oligo DNA

<400> 29

gaagaggacc tgttgagacc cacgtatgca ctgtggtac

39

<210> 30

<211> 27

<212> DNA

<213> Artificial Sequence

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<223> primer

<400> 30

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27

<210> 31

<211> 22

<212> DNA

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<223> primer

<400> 31

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22

<210> 32

<211> 26

<212> DNA

<213> Artificial Sequence

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<400> 32

acagaattcg aacgctgacg tcatca

26

<210> 33

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<212> DNA

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43

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<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> oligo DNA

<400> 34

ctagaggtag cagctgctag cg

22

<210> 35

<211> 22

<212> DNA

<213> Artificial Sequence

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<223> oligo DNA

<400> 35

aattcgctag cagctggtac ct

22

<210> 36

<211> 19

<212> RNA

<213> Homo sapiens

<400> 36

gauaaguucu gaacgucga

19

<210> 37

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<212> DNA

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gaaa

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64

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64

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<211> 35

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<210> 41

<211> 78

<212> DNA

<213> Artificial Sequence

<220>

<223> oligo DNA

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agaacagaat ctagagct

60

78

<210> 42

<211> 78

<212> DNA

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<400> 42

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ggaagtcgag gtaccgct

60

78

<210> 43

<211> 33

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<400> 43

cggaattcat gtctctgtgg ggtctggtct cca

33

<210> 44

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 44

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